

# PATENT ABSTRACTS OF JAPAN

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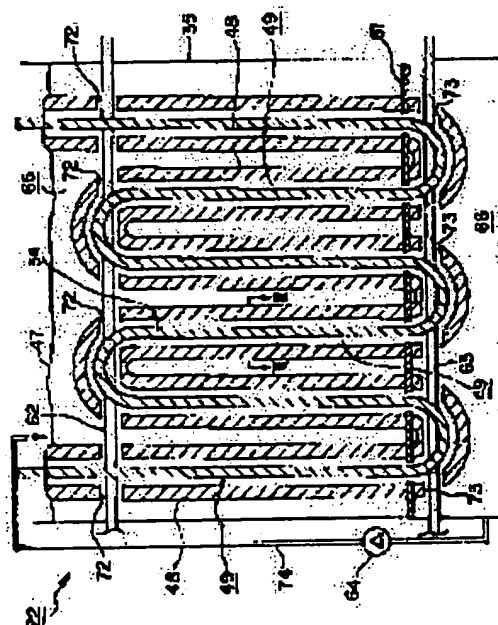
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## (54) ICE HEAT STORAGE UNIT OF AIR-CONDITIONER EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To improve heat transfer performance at low costs.

SOLUTION: In an ice heat storage unit 22 of air-conditioner, a coil 34 for allowing a refrigerant to flow inside is arranged in an ice heat storing tank 35 while the coil is submerged, and ice 48 can be formed at the outer periphery of the coil. The ice heat storage unit 22 is provided with a partition plate 61 that crosses the meandering coil and is provided in the ice heat storage tank 35 and divides the ice heat storing tank 35 into upper and lower chambers 65 and 66, thawing pipes 62 and 63 that cross the coil in each chamber of the ice heat storing tank 35, at the same time, are provided near the coil, allow ice to melt when the chill of the ice at the outer periphery of the coil is transferred to the refrigerant in the coil for melting the ice and a water column 49 is formed between the coil and ice, and can form upper and lower thawing holes 72 and 73 passing from the outer periphery of the ice to the water column, and a pump 64 that supplies fluid into the water



column from one chamber of the ice heat storage tank 35 via the thawing hole and can move the water of the water column.

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## LEGAL STATUS

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